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SPECIFICATION:

PLEASE AMEND THE BRIEF DESCRIPTION OF THE DRAWINGS AS FOLLOWS:

Figure 1a (prior art) illustrates a fiber assembly of a typical implementation of a high-speed data transmission link using a single optoelectronic for each half of a duplex channel.

Figure 1b (prior art) illustrates an optical assembly of a typical implementation of a high-speed data transmission link using a single optoelectronic for each half of a duplex channel.

Figure 1c (prior art) illustrates a schematic view of the fiber assembly of Fig. 1a and the optical assembly of Fig. 1b.

Figure 1d (prior art) illustrates the high-speed duplex data communications module using known precision manufactured parts to implement the transmit and receive links of a high-speed duplex data communications channel of Fig. 2.

Figure 2 (prior art) illustrates a high-speed duplex data communications module using known precision manufactured parts to implement the transmit and receive links of a high-speed duplex data communications channel.

Figure 3 illustrates a cross-section of an integrated VCSEL and an MSM photodetector in accordance with the present invention.

Figure 4 illustrates a monolithic plan view of a preferred embodiment of the invention.

Figure 5a illustrates a cross-section of a VCSEL and a p-i-n photodiode in accordance with the present invention.

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Figure 5b illustrates Figures 5b and 5c respectively illustrate the orientation of the VCSEL laser diode and the p-i-n photodiode as illustrated by the cross-section in Fig. 5a.

Figure 6a (prior art) illustrates a commercially available dual fiber version of a round fiber ferrule. .

Figure 6b (prior art) illustrates a commercially available rectangular multifiber ferrule.

Figure 7a illustrates how the present invention can be packaged using conventional lead-frame technology to facilitate interface to a rectangular multifiber ferrule.

Figure 7b illustrates how optical lenses can be integrated with the present invention.

Figure 7c illustrates how the present invention can be implemented using butt coupling technology.

Figure 8 illustrates how a transmit and receive pair made in accordance with the present invention can be packaged to interface with a round multifiber ferrule such as the one illustrated in Fig. 6a.